

What is Claimed is:

1. An accelerometer capable of compensating initial capacitances comprising:

5 a horizontally movable floating mass;

support beams extended from a beam-fixing section to elastically support both ends of the mass;

movable electrodes extended outward from both sides of the mass to a predetermined length;

10 fixed electrodes extended from electrode-fixing sections to a predetermined length, and alternating with the movable electrodes with a predetermined gap; and

compensation electrode sections for displacing the mass in a moving direction of the mass to equalize an initial
15 capacitance between the movable and fixed electrodes at one side with that between the movable and fixed electrodes at the other side.

2. The accelerometer capable of compensating initial
20 capacitances according to claim 1, wherein the support beams are elastic bodies for connecting the mass with the beam-fixing section which is arranged in an opening formed in a central portion of a body of the mass.

25 3. The accelerometer capable of compensating initial

capacitances according to claim 1, wherein the support beams are elastic bodies for connecting the mass with the beam-fixing sections arranged adjacent to the both ends of the mass.

5 4. The accelerometer capable of compensating initial capacitances according to claim 1, wherein the compensation electrode sections include:

 at least one movable compensation electrode extended outward from the both ends of the mass to a predetermined length;

10 at least one fixed compensation electrode arranged parallel with the movable compensation electrode at a predetermined gap to generate electrostatic force for attracting the movable compensation electrode at application of electric power; and

15 compensation electrode-fixing sections fixed adjacent to the both ends of the mass to power the fixed compensation electrode extended toward the mass to a predetermined length.

20 5. The accelerometer capable of compensating initial capacitances according to claim 4, wherein the movable and fixed compensation electrodes are comb-shaped electrode members which are extended to a predetermined length in the moving direction of the mass.

25 6. The accelerometer capable of compensating initial

capacitances according to claim 4, wherein the movable and fixed compensation electrodes are comb-shaped compensation electrode members which alternate with each other with a uniform gap.

5 7. The accelerometer capable of compensating initial capacitances according to claim 1, wherein the compensation electrode sections include a control unit for controlling the movement of the mass, and

 wherein the control unit includes a comparison section for
10 comparing the initial capacitance between the movable and fixed electrodes at one side with that between the movable and fixed electrodes at the other side and a voltage-applying section for selectively applying voltage to a pair of compensation electrode-fixing sections until the comparison value becomes
15 zero.

 8. The accelerometer capable of compensating initial capacitances according to claim 1, wherein the compensation electrode sections are separately provided adjacent to the both
20 ends of the mass.

 9. The accelerometer capable of compensating initial capacitances according to claim 4, wherein one of the movable and fixed compensation electrodes has at least one projection
25 which contacts a body of an opposed electrode in the deformation

of thereof.

10. The accelerometer capable of compensating initial capacitances according to claim 9, wherein the projection is
5 extended in the form of a prism to perform point contact with the corresponding movable or fixed compensation electrode.

11. The accelerometer capable of compensating initial capacitances according to claim 9, wherein the projection is
10 extended in the form of a semicylinder to perform line contact with the corresponding movable or fixed compensation electrode.